

RepSil™ NS Non-Sag Silicone Joint Sealant

DESCRIPTION:

RepSil NS is a one-component, non-sag moisture curing, low modulus silicone for sealing joints in Portland cement concrete pavements in all climates. For use in new construction, repair, or remedial applications, providing a lasting and flexible seal. **RepSil NS** bonds tenaciously to concrete and asphalt without the use of a primer.

FEATURES:

- Ultra-low modulus.
- Weather and UV resistant.
- Fuel resistant-short term exposure.
- Can be extruded from -20° to 200°F.
- Flows into irregular joint widths.
- Movement capability (+100% / - 50%)
- Cold applied, ready-to-use as supplied.
- No heating or special preparation
- Primer is not required for concrete and asphalt.
- Quick Skin over- allows open to traffic asap.

USES:

- Airfield & Highway Pavement
- Bridge Joints, Headers, Ramps
- Parking garages, Plaza decks, Driveways
- All Concrete & Masonry

TECHNICAL DATA:

Conforms to FAA Eng. Brief # 36
FAA P-605 for Silicone Joint Sealants
Meets SS-S-200E (section 4.4.12) Flame Test Requirements
EN 14187-5 Hydrolysis Test.
TT-S-00230C, TT-S-001543A, ASTM C-920, Type S, Grade NS, Class 25, Use NT, M, A, & O
ASTM D 5893 Type NS

COVERAGE GUIDE:

See sealant below or “use” estimating workbook attached.

PREPARATION:

Concrete and masonry substrates shall be cured prior to the application of the sealant. The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance, or other surface contaminants. Concrete surfaces require a light sandpaper finish equal to or greater than an ICRI CSP #1-3. Surface preparation may be completed with the use of **TuffTex PrepEtch**. (See **PrepEtch Brochure**)

MIXING:

RepSil NS is a one-component, ready-to-use material that requires no mixing.

PLACEMENT:

Ready to use, apply using professional caulking gun or dispensing equipment. Do not open product container until preparation work has been completed. Apply sealant using consistent, positive pressure to force sealant into the joint. In general, apply the sealant so that it is recessed 3/8 inch (9 mm) below the surface. For precast parking deck joints, recess 1/4 inch (6 mm). For highway joints, recess 3/8” inch (9 mm) to 1/2” (13mm). **RepSil NS** is non-sag therefore, no tooling is needed. It is typical that **RepSil NS** may retain some residual surface tack in its first 3-5 days of cure. This condition does not affect the time the surface joint can be open to service in a properly recessed sealant joint. **RepSil NS** will obtain adhesion to aged, cured asphalt. Never use on newly poured asphalt without a primer. Conduct a field test to document and confirm adhesion under actual jobsite conditions.

CURING:

RepSil NS will have a skin-over time of one hour or less at standard conditions allowing roadways to quickly be opened to traffic.

CLEAN UP:

Tools and Equipment: Clean before the sealant cures with **RepSolv X** or **RepGreen**.

PACKAGING:

RepSil NS Non-sag Silicone Joint Sealant is supplied in 20 oz. (592-ml), 5-gal (18.93-L) pails and 50-gal (189-L) bulk drums.

COLOR:

Concrete Gray

STORAGE:

The material should be stored between 40°F – 95°F (4°C – 35°C) in a cool, dry area away from direct sunlight.

SHELF LIFE:

Shelf life of safely stored unopened containers is 24 months (two years). Excessive temperature differential and high humidity can shorten the shelf-life expectancy.

CAUTION:

READ SDS PRIOR TO USING PRODUCT.

Keep out of the reach of children. Do not take internally. In case of ingestion, seek medical help immediately. May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water, and seek medical help as needed. If eye contact occurs, flush immediately with clean water and seek medical help as needed. Dispose of waste material in accordance with federal, state, and local requirements. Cured Resins are Innocuous.

WARRANTY:

Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either **TuffTex Materials, Inc.**, or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

DISCLAIMER:

Refer to the SDS sheet before use. The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of **TuffTex Materials, Inc.** Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Published technical data and instructions are subject to change without notice. Contact your local **TuffTex Materials, Inc.** distributor or technical representative for additional technical data and instructions.

Joint Sealant Coverage Chart (linear feet per gallon)

		Width of Joint (in.)												
		1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1.25"	1.5"	1.75"	2"		
Depth of Joint (in.)	3/16"	411	275	205	164									
	1/4"	307	205	154	123	103	88	77	62	51	44	38		
	3/8"			103	82	68	59	51	41	34	29	26		
	1/2"			77	62	51	44	39	31	26	22	19		
	5/8"									25	21	18	15	
	3/4"									21	17	15	13	

PHYSICALS:

TEST ITEM	TEST RESULTS	STANDARD
Cure Evaluation	Pass	No presence of uncured material
Rheological Properties		
Type NS Slump (mm)	2.5	≤ 7.6
Extrusion Rate	21	≥ 20
Specific Gravity	1.4	Report
Tack-free Time	Pass	No transfer of sealant when tested at 5 hours +/- 10 min
Actual Tack-free Time	60 min	5 hours max
Percent Weight Loss	1	≤ 10
Visual	Pass	No cracking or chalking
Bond (Pass/Fail) 3 Tests	Pass	No crack, separation, or other opening
Hardness, Type A -2	25	≤ 25
Flow	Pass	No flow
Ultimate Elongation	824	≥ 600
Tensile Stress @ 150 Elongation	23	≤ 45
Effects of Accelerated Weathering (5000h)	Pass	No cracks or separation
Resilience (%)	79	≥ 75
Useable Temperature Range	-76°F to 392°F (-60°C to 200°C)	ASTM D5893

